September 9, 1998

This document was submitted to EPA by a registrant in connection with EPA's evaluation of this chemical and it is presented here exactly as submitted.

17/OPP#34136

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VALENT®

August 20, 1996

NALED REREGISTRATION:
VALENT COMMITMENTS

Case No.:	0092 Naled
EPA Chemical No.:	034401
EPA Company No.:	59639

Ms. Susan Jennings
Office of Pesticide Programs
Special Review and Reregistration Division, 7508W
U.S. Environmental Protection Agency
Room 33L4, Crystal Station
2805 Jefferson Davis Highway
Arlington, VA 22202

Dear Ms. Jennings:

As the RED for naled nears completion, we would like at this time to recap and summarize all the commitments Valent has previously made or is willing to make to mitigate risk from exposure to naled, in response to EPA's occupational/residential, dietary and ecological risk characterizations. Valent is making several new mitigation proposals at this time, addressing occupational exposure.

Occupational / Residential Handler Exposure

- Valent will phase in a requirement to use closed mixing/loading systems for all naled products, with implementation to be completed by the year 2000. The closed system requirement would not apply for workers handling one gallon or less of product per day. The latter exemption would limit use of application equipment for which closed mixing/loading systems are unavailable (e.g. backpack sprayer, greenhouse hot plate) to no more than one gallon of product per day.

- For airblast uses, Valent will mandate use of enclosed cab application for those crops where use of such equipment is accepted agricultural practice. Valent is willing to negotiate with EPA a time frame for determining to which crops the restriction would apply.

- For aerial uses, Valent will mandate use of closed cockpit aircraft application, as indicated in our submission of 12/14/95.

(1)

- Valent will prohibit use of backpack sprayers for agricultural uses, including ornamental and tree crops.

- Valent will amend all naled labels to specify use only by trained applicators for all uses, not for use by homeowners, as indicated in our submission of 8/14/95.

- As indicated in our submission of 12/14/95, Valent agrees to amend non-agricultural uses of naled to mandate use of personal protective equipment specified under the Worker Protection Standard for agricultural uses, except to the extent PPE may be reduced by use of engineering controls.

- Valent will cancel DIBROM® Fly & Mosquito Spray (1% ready to use formulation) registration (59639-21), as indicated in our submission of 12/14/95.

- Valent will cancel all wet and dry bait uses (Fly Killer D, 3.6 lbs/gal EC, EPA Reg. No. 59639-18), as indicated in our submission of 12/14/95.

- Valent will cancel the cockroach spot treatment uses (Fly Killer D, 3.6 lbs/gal EC, EPA Reg. No. 59639-18), as indicated in our submission of 12/14/95.

- Valent will cancel the greenhouse heat/steam pipe painting use, and amend the hot plate/pan use to include directions designed to minimize handler exposure (DIBROM 8 Emulsive, 7.5 lbs/gal EC, EPA Reg. No. 59639-15), as indicated in our submission of December 14, 1995. Proposed language may be found in Attachment A.

- Valent agrees to reduce the maximum rate for use on peaches and almonds to 2.8 lbs ai/acre (single application).

Dietary Exposure

- Valent will amend agricultural uses to specify maximum product use per season, and minimum application interval where these are not already specified. A summary of the proposed changes, found in Attachment B, has previously been provided to EPA.

- Valent will submit residue data supporting pasture/rangeland uses where application rates are 0.4 lb ai/acre or greater, as indicated in our letter of 7/18/96. The data are due by 6/26/98. The remaining pasture/rangeland uses (0.25 lb ai/acre or less) are adequately supported by the tolerance for area pest (mosquito and fly) control.

- We concur with EPA's tolerance reassessment for naled, presented in Table C of the draft

RED Residue Chemistry Chapter, with the following exceptions:

1) Valent concurs with revocation of the forage legume tolerance, but no new tolerances are needed for cowpea forage and hay or field pea vines and hay, because Valent has submitted a label amendment prohibiting use on cowpeas and field pea cultivars grown for livestock feeding, as explained in our letter of 4/4/96.

2) Sales of naled on cole crops (Brassica leafy vegetables) do not justify the residue trial program proposed by EPA to support these crop tolerances. Valent is willing to conduct two residue trials, on cabbage and cauliflower, to support tolerances with regional (California-only) registration for cabbage, cauliflower , collards and kale. This proposal was explained in our letter of 3/22/96. Since Valent will not generate the data required to support a general Brassica leafy vegetable crop group tolerance, we propose that tolerances for broccoli and Brussels sprouts be reduced to 0.1 ppm as proposed by EPA in earlier drafts of the RED Residue Chapter.

3) Valent is not supporting tolerances for pumpkins and winter squash, which are still listed in the draft RED Residue Chapter as active tolerances requiring additional data.

Reentry Exposure

- Valent will amend restricted entry intervals to 2 days for all crops where rates are applied at 0.938 lb ai/acre or less, and 3 days for crops where rates are higher. Valent understands that these REI's are interim, and subject to revision pending submission of additional foliar dislodgeable residue data. Valent commits to develop and submit additional foliar dislodgeable residue data for grapes.

Ecological Effects

- Valent will place the following statement under the ENVIRONMENTAL HAZARDS section of the DIBROM 8 Emulsive label, as indicated in our letters of 6/9/95 and 3/29/96: *Do not apply within 24 hours following rainfall or irrigation, or in areas where intense or sustained rainfall is forecasted to occur within 24 hours following application.*

- Valent agrees to amend agricultural uses to include spray drift and runoff mitigation language, as indicated in our letter of 3/29/96. See Attachment C for proposed label text.

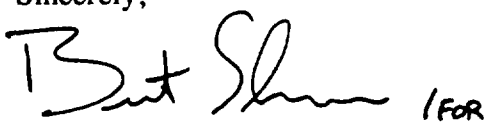
- Valent will limit the number of applications on citrus and safflower to three, as indicated in our submission of 6/9/95.

- Valent has committed to supply avian reproduction data to EPA by 2/21/98. Studies are in progress.

Valent stands by all the above commitments, and requests that EPA take them into consideration in preparation of the final naled Reregistration Eligibility Decision document. We expect that EPA will review these proposals, and incorporate those that are found acceptable into the RED document.

If you have any questions, please call me at (510) 256-2770, or Brent Solomon at our Washington, D.C. office (202) 872-4682.

Sincerely,



Daniel P. Fay
Project Manager
Registration & Regulatory Affairs

Attachments

cc: Lawerence Schnaubelt/OPP/SRRD
Karen Whitby/OPP/RD/PM Team 14
Leonard Cole/OPP/RD

ATTACHMENT A

Proposed amendment to greenhouse hot plate/pan use on DIBROM 8 Emulsive label (EPA Reg. No. 59639-15):

Pour recommended amount of DIBROM 8 Emulsive into a disposable metal pan on an unheated hot plate. Applicator must wear full handler personal protective equipment. Hot plate must be activated by an automatic timer after all workers have vacated the greenhouse and the greenhouse is locked. Greenhouse must be ventilated automatically until one of the WPS ventilation criteria have been met, prior to any worker reentry. Chemical resistant gloves must be worn while collecting used metal pans, and pans shall be collected prior to expiration of restricted entry interval. Pans must be disposed after use according to approved pesticide container disposal procedures

ATTACHMENT B
Summary Table of Amended Agricultural Uses for Dibrom (Naled) Insecticide

August 20, 1996

Use Site	Max. Rate (lbs ai/acre)	Max. No. Applic.	Min. Spray Interval (days)	Preharvest Interval (days)	Reentry Interval (days)	Application Method
Alfalfa Seed	1.4	3	7	n/a (non-food)	3	Air or groundboom
Almonds, Peaches	2.8	1 (dormant)	n/a	n/a (dormant)	3	Airblast
Celery	1.4	5	7	1	3	Air or groundboom
Chard, Spinach	1.4	5	7	2	3	Air (CA/AZ only) or groundboom
Citrus	1.875*	3	7	7	3	Airblast or groundboom
Cole Crops	1.875*	5	7	1	3	Air or groundboom
Cotton	0.938	5	7	>21	2	Air or groundboom
Eggplants, Peppers	1.875*	3 @ 1.8 lbs. 6 @ 0.9 lb.	7	1	3	Air or groundboom
Grapes	0.938	6	7	3	2	Airblast (CA only) or groundboom
Melons	0.938**	2	7	1	3	Air or groundboom
Peas, Beans	1.4	3	7	1	3	Air (CA only) or ground
Safflower (CA/AZ only)	0.7	3	7	30	2	Air or groundboom
Strawberries	0.938	5	7	1	2	Groundboom
Sugarbeets	0.938	5	7	2	2	Air or groundboom
Summer Squash	1.875*	3 @ 1.8 lbs. 6 @ 0.9 lb.	7	1	3	Air or groundboom
Walnuts	1.875	2	7	10	3	Air (CA only) or ground
Rangeland	0.938	5	7	n/a		Air or groundboom

* Valent will reduce maximum rate to 0.938 lb ai/acre only in Florida to mitigate exposure to aquatic organisms

** Recently amended from 1.875 lbs ai/acre

ATTACHMENT C

Proposed DIBROM® 8 Emulsive Label Language for Mitigation of Off-Site Deposition from Agricultural Applications

SPRAY DRIFT MANAGEMENT

AVOIDING SPRAY DRIFT AT THE APPLICATION SITE IS THE RESPONSIBILITY OF THE APPLICATOR.

The interaction of many equipment and weather-related factors determine the potential for spray drift. The applicator is responsible for considering all these factors when making decisions.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN MAKING ANY APPLICATION TO AGRICULTURAL CROPS IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES; RESERVOIRS; RIVERS; PERMANENT STREAMS, MARSHES, OR NATURAL PONDS; ESTUARIES AND COMMERCIAL FISH FARM PONDS.

General precautions (aerial, ground and air-assisted/airblast applications):

- All aerial, ground and air-assisted/airblast application equipment must be properly maintained and calibrated using water as carrier.

- Do not cultivate within 10 feet of the aquatic area so as to allow growth of a vegetative filter strip to alleviate drift, and mitigate runoff.

- Use the largest droplet size consistent with pest control. Formation of very small drops may be minimized by (1) using a nozzle type designed for the intended application, (2) selecting high flow rate nozzles, (3) avoiding spray pressure which exceeds the nozzle manufacturer's recommendation, (4) using the minimum number of nozzles that provide uniform coverage, and (5) orienting nozzles away from the air stream as much as possible (for aerial and air assisted/airblast application). Do not increase spray volume by increasing spray pressure.

- Risk of exposure to aquatic areas can be reduced by avoiding applications when wind direction is toward the sensitive areas.

- When making applications in low relative humidity, set up equipment to produce larger droplets to compensate for evaporation. Droplet evaporation is most severe when conditions are both hot and dry.

General precautions (aerial applications only):

The first two drift management requirements listed below *must* be followed to avoid off-target movement from aerial applications to agricultural field crops. These requirements do not apply to forestry applications or public health uses. Where states have more stringent requirements, they should be observed.

- NOZZLES MUST ALWAYS POINT BACKWARD PARALLEL WITH THE AIR STREAM, AND NEVER BE POINTED DOWNWARDS MORE THAN 45 DEGREES.

- THE DISTANCE OF THE OUTERMOST NOZZLES ON THE BOOM MUST NOT EXCEED 3/4 THE LENGTH OF THE WINGSPAN.

- Do not apply this product as an ultralow volume (ULV) spray (<½ gallon per acre), or in any carrier other than water.

- For some use patterns, reducing the effective boom length to less than 3/4 of the wingspan length may further reduce drift without reducing swath width.

- Aerial applications should not be made at a height greater than 10 feet above the top of the target plants unless a greater height is required for aircraft safety. Making applications at the lowest height that is safe reduces exposure of droplets to evaporation and wind.

- Drift potential is lowest between wind speeds of 2 - 10 mph. However, many factors, including droplet size and equipment type determine drift potential at any given speed. Application should be avoided below 2 mph if variable wind direction and high inversion potential exist. NOTE: Local terrain can influence wind patterns. Every applicator should be familiar with local wind patterns and how they affect spray drift.

- Applications should not occur during local, low level temperature inversions. Temperature inversions restrict vertical air mixing, which causes small suspended droplets to remain in a concentrated cloud. This cloud can move in unpredictable directions due to the light variable winds common during inversions. Inversions are characterized by stable air and increasing temperatures with altitude. Their presence can be indicated by ground fog, or, by the movement of smoke that layers and moves laterally in a concentrated cloud (under low wind conditions). The applicator may use a smoke generator or other smoke source to determine whether an inversion is present.

Precautions specific to field and vegetable crops (beans, broccoli, Brussels sprouts, cabbage, cauliflower, celery, collards, cotton, eggplant, kale, melons, peas, peppers, safflower, spinach, strawberry, summer squash, Swiss chard, and sugar beets):

Ground Application

- Do not apply by ground within **25 feet** of lakes; reservoirs; rivers; permanent streams, marshes, or natural ponds; estuaries and commercial fish farm ponds, where wind is blowing or gusting toward these areas.

Aerial Application

- Do not apply by air within **150 feet** of lakes; reservoirs; rivers; permanent streams, marshes, or natural ponds; estuaries and commercial fish farm ponds, where wind is blowing or gusting toward these areas.

Precautions specific to air assisted (airblast, mist blower, etc.) applications to tree and vine crops (almond, citrus, grape, peach, and walnut):

- Do not apply by air-assisted/airblast application to almonds or peaches (dormant / delayed dormant use) within **100 feet** of lakes; reservoirs; rivers; permanent streams, marshes, or natural ponds; estuaries and commercial fish farm ponds, where wind is blowing or gusting toward these areas.

- Do not apply by air-assisted/airblast application to grapes, citrus or walnuts within **50 feet** of lakes; reservoirs; rivers; permanent streams, marshes, or natural ponds; estuaries and commercial fish farm ponds, where wind is blowing or gusting toward these areas.

- Spray the outside two rows using nozzles directed toward the inside of the orchard/vineyard only. Shut off nozzles when turning at the ends of rows. Further reduction of spray drift may be obtained by shutting the nozzles off (manually or automatically) when passing gaps between adjacent or missing trees or vines.

- Sprayer air deflectors and nozzle orientation should be adjusted to ensure that the spray pattern is properly directed toward the desired canopy location. Avoid spraying over the tops of trees by adjusting or turning off the top nozzles. Turn off as many nozzles as necessary to direct spray to small trees.